

**EARTH SYSTEM SCIENCE**

Data and Services

OCEAN Data Set Reference Sheet

January 2011

Physical Properties	Data Center	Selected Data Sets and Data Collections
<i>Complete data set listings available through each individual data center. For more information about NASA's Earth Observing System Data and Information System (EOSDIS) data centers, see: http://nasadaacs.eos.nasa.gov</i>		
Surface Temperature SST	LaRC ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • First ISCCP Regional Experiment (FIRE) data sets
	GES DISC http://disc.sci.gsfc.nasa.gov	<ul style="list-style-type: none"> • Ocean Color Radiometry Visualization and Analysis, through Giovanni tool
	GHRC DAAC http://ghrc.nsstc.nasa.gov	<ul style="list-style-type: none"> • TRMM Microwave Imager (TMI) Wentz Ocean Products (SST under all cloud conditions, plus surface wind speed and other atmospheric parameters) • Advanced Microwave Sounding Unit-A (AMSU-A) Swath from NOAA-15, NOAA-16, NOAA-17
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • AMSR-E/Aqua Daily, Weekly, and Monthly L3 Global Ascending/Descending .25x.25 deg Ocean Grids • AMSR-E/Aqua L2B Global Swath Ocean Products derived from Wentz Algorithm
	OceanColor Web http://oceancolor.gsfc.nasa.gov/	<ul style="list-style-type: none"> • MODIS/Terra and MODIS/Aqua Level-2 Standard SST Product • MODIS/Terra and MODIS/Aqua Level-3 Binned SST Products [daily, 8-day, monthly, monthly climatology, seasonal, seasonal climatology, and yearly files] • MODIS/Terra and MODIS/Aqua Level-3 Standard Mapped SST Products [daily, 8-day, monthly, monthly climatology, seasonal, seasonal climatology, and yearly files]
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> • Group for High Resolution Sea Surface Temperature (GHRSST) L2P, L3 and L4 SST products • AVHRR Oceans Pathfinder 4km Global SST • AVHRR Oceans Pathfinder 9km Global SST and Buoy Match-up Data • AVHRR Pathfinder Global 9km SST Climatology • NSIPP AVHRR Pathfinder and Erosion Global 9km SST Climatology • NAVOCEANO MCSST Level 2 HRPT/LAC Data • AVHRR Orbital 9km MCSST Level (NAVOCEANO) • AVHRR Weekly Global 18km Gridded MCSST (Univ of Miami) • GOES L3 6km Near-Real-Time SST (NOAA/NESDIS) • Global Ocean Surface Temperature Atlas Plus (GOSTAplus) • MODIS/Terra Global Level 3 Mapped Thermal IR and Mid-IR SST • MODIS/Aqua Global Level 3 Mapped Thermal IR and Mid-IR SST • NCEP Reynolds Optimally Interpolated SST • NCEP Reynolds Extended Reconstructed Sea Surface Temperatures SST
Ocean Surface Topography Height, waves, sea level, tide models	LaRC ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • First ISCCP Regional Experiment (FIRE) data sets
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • GLAS/ICESat L2 Global Ocean Altimetry Data
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> • Jason-1 Sea Surface Height Anomaly Products (Along-Track and Along-Track Gridded) • Jason-1 OSDR (Operation Sensor Data Record) • Jason-1 IGDR (Interim Geophysical Data Record) • Jason-1 Geophysical Data Record (GDR) • TOPEX/POSEIDON Sea Surface Height Anomaly Products (Along-Track and Along-Track Gridded) • TOPEX/POSEIDON Altimeter Merged Geophysical Data Record (MGDR) Generation B • Monthly Steric Sea Level from Jason-1 and GRACE • GRACE Dynamic Ocean Topography • OSTM/Jason-2 Near Real Time SSHA
Ocean Circulation	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> • OSCAR - Ocean Surface Current • ECCO2 - Ocean Circulation and Climate

Phytoplankton & Dissolved Organic Matter	OceanColor Web http://oceancolor.gsfc.nasa.gov/	<ul style="list-style-type: none"> • MODIS/Aqua Level-2 Standard Ocean Color Product [normalized water-leaving radiances at 6 visible wavelengths, chlorophyll-a concentration, diffuse attenuation coefficient plus parameters related to aerosol corrections] • SeaWiFS Level-2 Standard Ocean Color Product [remote-sensing reflectances, particulate inorganic carbon (PIC), particulate organic carbon (POC)] • OCTS Level-2 Standard Ocean Color Product [same geophysical parameter set] • CZCS Level-2 Standard Ocean Color Product [same geophysical parameter set, with 4 visible wavelengths] • MODIS/Aqua, SeaWiFS, OCTS, and CZCS Level-3 Binned Ocean Color Products [All Level-2 parameters in daily, 8-day, monthly, monthly climatology, seasonal, and yearly products, plus seasonal climatology for MODIS/Aqua] • MODIS/Aqua, SeaWiFS, OCTS, and CZCS Level-3 Standard Mapped Image Ocean Color Products [Chlorophyll-a, the normalized water-leaving radiance closest to 550 nm for each instrument, diffuse attenuation coefficient (except for CZCS), aerosol optical depth, and angstrom coefficient, separately available for all temporal resolutions corresponding to the Level-3 Binned Products, plus 32-day rolling products for MODIS/Aqua and SeaWiFS] • MODIS/Terra Level-3 Ocean Color Products [A limited set starting from January 2007 of Level-3 Binned and Mapped Image Products] • SeaWiFS Level-3 PAR Binned and Mapped Image Products [Photosynthetically Active Radiation reaching the ocean surface, available in daily, 8-day, monthly, seasonal, and yearly files] • MODIS/Aqua Merged Chlorophyll (Combined MODIS-SeaWiFS data daily, 8-day, monthly, seasonal, and yearly products, plus a rolling 32-day composite)
	GES DISC http://disc.sci.gsfc.nasa.gov	<ul style="list-style-type: none"> • Ocean Color Radiometry Visualization and Analysis, through Giovanni tool
Surface Wind Fields	LaRC ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • First ISCCP Regional Experiment (FIRE) data sets • Surface meteorology and Solar Energy (SSE) data set
	GHRC DAAC http://ghrc.nsstc.nasa.gov	<ul style="list-style-type: none"> • MSFC SSM/I Tb and Product Grids from DMSP F13, F14, and F15 • MSFC SSM/I Tb and Product Swaths from DMSP F13, F14, and F15 • TRMM Microwave Imager (TMI) Wentz Ocean Products (with other atmospheric parameters plus SST under all cloud conditions)
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • AMSR-E/Aqua Daily, Weekly, and Monthly L3 Global Ascending/Descending .25x.25 deg Ocean Grids • AMSR-E/Aqua L2B Global Swath Ocean Products derived from Wentz Algorithm
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> • Advanced Scatterometer (ASCAT) L2 Near Real Time Ocean Vector Winds (at 12.5 and 25 km pixel resolution) • BYU Daily Browse Images of NSCAT, QuikSCAT, and SeaWinds Sigma-0 Measurements • SeaWinds on ADEOS-II and QuikSCAT Level 2B Wind Vectors (at 12.5 and 25 km pixel resolution) • SeaWinds on ADEOS-II and QuikSCAT Level 3 Wind Vectors • NSCAT Science Product, Levels 1.7, 2, 3 • NSCAT Global 25km Sigma-0 and Ocean Winds • Seasat Scatterometer Products • AMSR-E, SSM/I, and TMI Derived Global Ocean Wind Vectors • QuikSCAT Coastal High Resolution Wind Vectors (Regional) • Nimbus-7 SMMR Ocean Wind Speed • SCAT Coastal High Resolution Wind Vectors (Regional)
Multi-Parameter Data Collections	LaRC ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> • First ISCCP Regional Experiment (FIRE) data sets • CLAMS data sets • Global Tropospheric Experiment (GTE) data sets
	GHRC DAAC http://ghrc.nsstc.nasa.gov	<ul style="list-style-type: none"> • TRMM Microwave Imager (TMI) Wentz Ocean Products (Cloud liquid water, atmospheric water vapor, precipitation rate, wind speeds, and SSTs) • Advanced Microwave Sounding Unit-A (AMSU-A) Swath from NOAA-15, NOAA-16, NOAA-17
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> • AMSR-E/Aqua Daily, Weekly, and Monthly L3 Global Ascending/Descending .25x.25 deg Ocean Grids • AMSR-E/Aqua L2B Global Swath Ocean Products derived from Wentz Algorithm • GLAS/ICESat L2 Global Ocean Altimetry Data
Gravity Gravity Field Models, Measurements	CDDIS http://cddis.gsfc.nasa.gov	<ul style="list-style-type: none"> • Ground Network/Satellite Measurements: Daily, hourly, and sub-hourly code and phase observations from GNSS ground network; Daily and hourly files of round trip time of flight from satellite laser ranging (SLR) ground network; Time-tagged range-rate measurements from DORIS ground network • Station positions and velocities from GNSS, SLR, VLBI and DORIS ground networks • Daily and weekly precision satellite orbits derived from GNSS, SLR, and DORIS ground network observations. Note: Precise satellite orbits are required for higher level products.
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> • GRACE Level 2 Monthly Gravity Field Estimates • Surface Mass Density Changes from GRACE (monthly mass grids of water equivalent thickness)

Heat Flux	LaRC ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> First ISCCP Regional Experiment (FIRE) data sets
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> SMMR, GOES-W VISSR Tropical Pacific Surface Thermal Forcing Parameters SSM/I Derived Global Heat and Momentum Fluxes
Sea Ice See also the "Cryosphere Data Set Reference Sheet"	ASF SDC http://www.asf.alaska.edu	<ul style="list-style-type: none"> RADARSAT-1, ERS-1, ERS-2, JERS-1 and PALSAR SAR images ERS-1 Ice Motion Vectors RGPS Ice Motion and Thickness
	LaRC ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> International Satellite Cloud Climatology Project (ISCCP) D1, D2, and ICESNOW data products Multi-angle Imaging SpectroRadiometer (MISR) Level 1B2 Ellipsoid Data First ISCCP Regional Experiment (FIRE) data sets
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> Bootstrap Sea Ice Concentrations from Nimbus-7 SMMR and DMSP SSM/I Sea Ice Concentrations from Nimbus-7 SMMR and DMSP SSM/I Passive Microwave Data DMSP SSM/I Daily and Monthly Polar Gridded Sea Ice Concentrations Near Real-Time SSM/I EASE-Grid Daily Global Ice Concentration and Snow Extent Near Real-Time DMSP SSM/I Daily Polar Gridded Sea Ice Concentrations Sea Ice Trends and Climatologies from SMMR and SSM/I AVHRR Polar Pathfinder Twice-Daily 5, and 25 km EASE-Grid Composites GLAS/ICESat L2 Sea Ice Altimetry Data AMSR-E/Aqua Daily L3 12.5 km Brightness Temperatures, Sea Ice Concentration, and Snow Depth Polar Grids AMSR-E/Aqua Daily L3 25 km Brightness Temperatures & Sea Ice Concentration Polar Grids Polar Pathfinder Daily 25 km EASE-Grid Sea Ice Motion Vectors Snow Melt Onset Over Arctic Sea Ice from SMMR and SSM/I Brightness Temperatures MODIS/Terra Sea Ice Extent 5-Min L2 Swath 1km Data MODIS/Aqua Sea Ice Extent 5-Min L2 Swath 1km Data MODIS/Terra Sea Ice Extent and IST Daily L3 Global 1km & 4km EASE-Grid Data for Day and Night MODIS/Aqua Sea Ice Extent and IST Daily L3 Global 1km & 4km EASE-Grid Data for Day and Night
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> BYU Daily Browse Images of NSCAT Sigma-0 Measurements BYU Daily Browse Images of QuikSCAT Sigma-0 Measurements BYU Daily Browse Images of SeaWinds Sigma-0 Measurements BYU Enhanced Resolution Images of Seasat Sigma-0 Measurements BYU Enhanced Resolution Images of ERS Sigma-0 Measurements BYU Enhanced Resolution Images of NSCAT Sigma-0 Measurements
	LaRC ASDC http://eosweb.larc.nasa.gov	<ul style="list-style-type: none"> First ISCCP Regional Experiment (FIRE) data sets Chesapeake Lighthouse and Aircraft Measurements for Satellites (CLAMS) (CLAMS_CERES_CHESLIGHT SONDE) NASA Water Vapor Project (NVAP) data sets
Atmospheric Moisture (Oceanic Only) See also the "Atmosphere Data Set Reference Sheet"	GHRC DAAC http://ghrc.nsstc.nasa.gov	<ul style="list-style-type: none"> MSFC SSM/I Tb and Product Grids from DMSP F13, F14, and F15 MSFC SSM/I Tb and Product Swaths from DMSP F13, F14, and F15
	NSIDC DAAC http://nsidc.org/daac	<ul style="list-style-type: none"> AMSR-E/Aqua Daily, Weekly, and Monthly L3 Global Ascending/Descending .25x.25 deg Ocean Grids AMSR-E/Aqua L2B Global Swath Ocean Products derived from Wentz Algorithm
	PO.DAAC http://podaac.jpl.nasa.gov	<ul style="list-style-type: none"> SSM/I Pathfinder Atmospheric Moisture Level 2 and Level 3 Nimbus-7 SMMR Water Vapor and Columnar Liquid Water

LaRC ASDC Langley Research Center (LaRC) Atmospheric Science Data Center (ASDC)

ASF SDC Alaska Satellite Facility (ASF) Synthetic Aperture Radar Data Center (SDC)

CDDIS Crustal Dynamics Data Information System

GES DISC Goddard Space Flight Center (GSFC) Earth Sciences Data and Information Services Center (DISC)

NSIDC DAAC National Snow and Ice Data Center DAAC

OceanColor Web Ocean Biology Processing Group

PO.DAAC Physical Oceanography DAAC

GHRC DAAC Global Hydrology Resource Center DAAC

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